## Please Amend the Abstract as follows:

The present invention relates to an An optical fiber (1') having at least one Bragg grating (11), the fiber comprising a core (2) surrounded successively by cladding (3) and by a coating (4), said the grating being obtained by being written directly in the core and/or the cladding of the fiber through the coating which is made of a material that is substantially transparent to ultraviolet type radiation used for writing said the grating, and wherein the material of said the coating contains a first polymer network interpenetrated by a second polymer.